## STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

## **DOCKET NO. 272**

RE: NORTHEAST UTILITIES SERVICE
COMPANY APPLICATION FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED
FOR THE CONSTRUCTION OF A
345-KV ELECTRIC TRANSMISSION
AND RECONSTRUCTION OF AN
EXISTING 115-KV ELECTRIC TRANSMISSION LINE BETWEEN
MIDDLETOWN AND NORWALK



March 16th, 2005

My name is Trish Bradley and I live at 47 Ironwood Lane in Durham, CT. As you well know, I have been dedicated to Docket 272 and have attended all but one hearing in front of the Connecticut Siting Council (CSC). I have been witness to the testimony on the dangers of electromagnetic fields (EMFs) and the correlation to childhood leukemia.

I am the mother of five wonderful children, and my husband and I have lived in the Royal Oak neighborhood of Durham/Middletown for the past 20 years. I have become an environmental and health activist not because I wanted to, but because it was the only way to protect my children.

In this final stage of Docket 272, I am terrified for the lives of my children. CL&P's easement cuts through the heart of my neighborhood crossing streets and yards where children play. Northeast Utilities (NU) has identified Durham as one of the five densely populated pockets along the 69 mile route. One hundred (100) families and approximately two hundred and fifty (250) children live in Royal Oak. Children's bedrooms in this neighborhood are three feet from the edge of the right-of-way (ROW). Northeast Utilities has acknowledged that at least one house in Royal Oak is 18 feet within the boundaries of the ROW. NU has also acknowledged that

other homes seem to be encroaching upon the ROW but a survey would be necessary to determine just how many are actually in the ROW. No survey has been done. PA 04-246 states that "At a minimum, the existing right-of-way shall serve as the buffer zone".

A "no net increase" judgment based on a calculated EMF level for a point in the future to another calculated point in the future will result in inaccurate conclusions. Actual EMF field measurements at the edge of the ROW taken by CL&P at homeowners requests on different days, different years, and different months in the numerous yards of which this upgrade will cross in Royal Oak Park have been less than one (1.0) mG on all occasions...even during the peak summer months. In the "Updated Exhibit to Supplemental Testimony of Dr. William H. Bailey", Table 1 (Magnetic Fields Associated with Buffer Zone Statutory Facilities Adjacent to PROPOSED ROUTE: Measurements, and Calculated Values for Existing, Proposed, and Low-Field Design Options) indicates that the Applicants have identified Royal Oak as a statutory facility and given it ID No. R-11. Under the column labeled "Measurements of Fields from Existing Transmission Lines and Other Sources", the sub-column "Magnetic Field (mG)" reads zero point eight (0.8) at zero (0) feet from the edge of the ROW in the Royal Oak Neighborhood.

Table 5, page 26 of Volume 6 of the application lists "Existing" EMF levels for the "2007 annual average loading (15 GW)" along the edges of the ROW for all cross-sections of Phase II. The calculated EMF levels for cross-section 2 (Durham, Middlefield, Middletown) at the edge of the ROW are 3.0 and 4.5 mG. These calculations were later revised based on the acceptance of Phase I. These calculations for a point in the future when Phase I is implemented are shown in the "updated EMF filing" of March 15<sup>th</sup>, 2004 and are still labeled as "Existing" EMF levels. These calculations based on the acceptance of Phase I have deceptively changed the "Existing" EMF levels for the 15GW average load for 2007 in Royal Oak from 3.0mG and 4.5 mG to 9.2 and 13.9 mG, respectively.

There is no correlation between those **calculations** and the actual field measurements taken over the past 20 years. Based on field measurements by CL&P, if the CSC has determined six (6.0) mG at the edge of the ROW as an acceptable level for public safety, there would be at least a 6-fold net increase (all measurements have been < 1.0 mG) in Royal Oak. This would

most definitely not be an improvement. Furthermore, this is a calculated level based on a 15 GW system load not a 27 GW load. Table A-3 (Edge of right-of-way magnetic field values for proposed and alternative line configurations. Highest hour loading in 2007 – 27 GW) in Volume 6 of the application shows that in 2007 there will be a 27 GW peak system load. That's only 2 years away. Clearly the use of at least a 27 GW system load is the appropriate and conservative system load for purposes of establishing buffer zones and maximum EMF levels. I implore that buffer zones and mitigation techniques be based on the maximum load of the line for the life of the line.

To mitigate EMFs NU has stated that it will be necessary to erect towers in Royal Oak that will be 8 to 12 feet in diameter and loom approximately 135 to 150 feet over our homes. Again, these homes are 3 feet from the edge of the ROW and some are in the ROW. With a tower height of 150 feet centered in a 125 foot ROW, in the case of an "extreme contingency situation" the fall zone for these towers will be approximately ninety feet outside of the ROW. Given the proximity of the homes in Royal Oak to the edge of the ROW, the towers or transmission lines could potentially land across roof tops, swimming pools, swing sets or even a child. For the safety of all, the maximum height of a tower should be based upon the width of a ROW. It should be no higher than half the width of the ROW less half the width of its base, if centered in the ROW. PA 04-246 states that "in the case of an electric or fuel transmission line, that the location of the line will not pose an undue hazard to persons or property along the area traversed by the line". I consider this an extreme hazard. The transmission towers in place today are merely telephone poles and cannot by any means pose an undue hazard to anything outside the ROW.

The ROW in Royal Oak is not owned in fee simple. It is an easement which traverses a 125 foot swath across my backyard. When my children open the back door and run out to play, they run directly into the ROW. The ROW literally runs diagonally across my backyard. This is not a unique situation in Royal Oak.

Not only will the transmission line upgrade cause potential health problems, it will create a devastating visual impact. This is a 24 year old neighborhood with mature trees. A crane was raised to a height of 117 feet in Royal Oak to demonstrate how horrific these towers will be. At only 117 feet, 18 to 33 feet lower than the towers now proposed, the crane was visible from every

viewpoint in the neighborhood and three neighboring towns! Black Walnut Drive in Royal Oak is at an elevation of over 400 feet. One of the most desirable neighborhoods in Durham will basically be destroyed.

No under ground studies in Docket 272 were done for any town east of Beseck. If under grounding is proven technically not feasible there is an alternate solution for Royal Oak. This bypass offers the opportunity to protect hundreds of people. More than once on record, the applicants have expressed their willingness to support a bypass which would divert the ROW to undeveloped land around this neighborhood. It is technically feasible and would not impact the reliability of the system. The proposed bypass would traverse a large parcel of land owned by Mr. John Moss, on the west side of route 17 in Durham, directly across from the Royal Oak neighborhood. In regard to the Royal Oak bypass, Mr. Moss has submitted a letter to the CSC stating that "this bypass is far and away the best solution for the community as a whole." He also goes on to say "I would encourage its serious consideration". The elected officials of three adjacent municipalities (Durham, Middlefield, Middletown) are on record as supporting the Royal Oak bypass, as well as are State Representative Ray Kalinowski, Senator Edward Meyer, and the Attorney General of the state of Connecticut, Richard Blumenthal.

Our house in Royal Oak has become our home where 20 years of memories have been created. It is a little corner of the world that we thought we could call our own. If this upgrade goes through Royal Oak we will be forced to make the choice between gambling with our children's lives or leaving our home and enduring a financially devastating impact to protect the health and lives of our five children.

Members of the Connecticut Siting Council, I put my trust in you to protect my children and all the children of Connecticut. Any amount of under grounding technically feasible should be designated for statutory areas. Where it is proven that the transmission lines cannot be buried, other feasible solutions should be utilized. Erecting massive steel towers is an unfavorable solution, as these pose additional hazards. The most important consideration should be the health and safety of the children of CT.

If only one child becomes ill as a result of this upgrade, it is one child too many.

This will not be the last transmission line upgrade in this state. It is Northeast Utilities mandate to supply energy to all parts of Connecticut now and in the future. Let's ensure that they do this in a responsible manner. Let our legacy be that we have improved the environment and enhanced the quality of life for all.

Let's transmit power across Connecticut in a manner we all can live with.

I thank you for your efforts.

Petern Brug

Trish Bradley 47 Ironwood Lane Durham, CT. 06422 3/9/05 STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

DOCKET NO. 272

RE: NORTHEAST UTILITIES SERVICE

COMPANY APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF A 345-KV ELECTRIC TRANSMISSION AND RECONSTRUCTION OF AN EXISTING 115-KV ELECTRIC TRANS-

MISSION LINE BETWEEN
MIDDLETOWN AND NORWALK.

John T Moss RFD 1 Box 170 Durham, CT 06422

## Dear Chairman Katz

This letter is in regard to the proposed changes to the existing high-tension lines passing through my property. My land runs along Rt. 17 across from the Royal Oak subdivision, from Snell road to the Middletown town line.

A recent issue of the local newspaper showed a proposed route for a bypass that would relocate the existing right-of-way North along the back of my property before jogging East to bypass Royal Oak. It was my understanding that if this was done the existing lines could also be rerouted to follow this path.

Although I am not thrilled with the thought of increasing the amount of my land affected by an easement, it would certainly seem that this bypass is far and away the best solution for the community as a whole. I naturally have concerns about the project that I would like to discuss but, as long as this route would not take my house or significantly impact the current use of this land, which primarily provides a privacy barrier, I would encourage its serious consideration.

Sincerely yours

John T Moss

John T Mon